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| APPLICATION NO.                        | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.    | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------|------------------|
| 10/549,544                             | 06/02/2006  | Jouni Rainio         | 05-02-FPP US           | 3721             |
| 33249                                  | 7590        | 01/17/2007           | EXAMINER               |                  |
| RESOLUTION PERFORMANCE PRODUCTS LLC    |             |                      | NILAND, PATRICK DENNIS |                  |
| ATTN: LISA JONES                       |             |                      | ART UNIT               | PAPER NUMBER     |
| 1600 SMITH STREET, P.O. BOX 4500       |             |                      | 1714                   |                  |
| HOUSTON, TX 77210-4500                 |             |                      |                        |                  |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE   |                      | DELIVERY MODE          |                  |
| 3 MONTHS                               | 01/17/2007  |                      | PAPER                  |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/549,544             | RAINIO, JOUNI       |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Patrick D. Niland      | 1714                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____                          |

1. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. It is unclear if “organic or inorganic surface-active” is intended to modify all of the members of the Markush group of claim 1 or only the sulfate compounds.

B. It is unclear what is encompassed by the abbreviations of the instant claim 7.

2. Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the derivatives described in the instant specification (Wands factor G), does not reasonably provide enablement for all of the encompassed “derivatives”. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

A. The instantly claimed “derivatives” read on an infinite number of compounds resulting from the potentially infinite number of derivations which can be performed on the recited compounds. It is noted that water and carbon dioxide are “derivatives” of the recited compounds of claims 1, 6, and 7 derived from pyrolysis of the claimed compounds in oxygen. In re Wands has 8 criteria, (MPEP 2164.01(a)), as shown below.

- (A)The breadth of the claims;
- (B)The nature of the invention;
- (C)The state of the prior art;
- (D)The level of one of ordinary skill;
- (E)The level of predictability in the art;

- (F)The amount of direction provided by the inventor;
- (G)The existence of working examples; and
- (H)The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

It is noted that the instant claims read on all potential derivatives of the recited compounds which encompasses an infinite number of compounds (Wands factor A). The specification does not describe how to make all such derivatives nor how to select those derivatives from the infinite list thereof which will function as required in the instant invention (Wands factors F, G). It would require an infinite amount of experimentation to determine how to make all of the derivatives encompassed by the instant claims and another infinite amount of experimentation to determine which of these derivatives would function in the instantly claimed invention as required (Wands factor H). Chemistry is an unpredictable art (Wands factor E). The ordinary skilled artisan has not imagined nor figured out how to make all of the derivatives encompassed by the instant claim of "derivatives" yet (Wands factors C, D, E, F, G, and H). The enabling disclosure is not commensurate with the full scope of the claimed "derivatives".

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/46349 Lappalainen et al..

Lappalainen discloses a foamed resin adhesive containing the instantly claimed ingredients in the instantly claimed amounts at the abstract; page 3, lines 15-32; page 4, lines 1-32, particularly 3-5, 10-12, 14-17; and the remainder of the document. The temperature of the instant claim 16 is not disclosed. However, it is not seen that this temperature makes an adhesive which is different than that described by Lappalainen. The surfactants of Lappalainen are derivatives, at least theoretically, of the compounds recited as the instantly claimed surfactants.

6. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/46349 Lappalainen et al..

Lappalainen discloses a foamed resin adhesive containing the instantly claimed ingredients in the instantly claimed amounts at the abstract; page 3, lines 15-32; page 4, lines 1-32, particularly 3-5, 10-12, 14-17; and the remainder of the document. The temperature of the instant claim 16 is not disclosed. However, it is not seen that this temperature makes an adhesive which is different than that described by Lappalainen.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed ingredient combinations and amounts thereof because they are encompassed by the reference and would have been expected to give the properties disclosed by Lappalainen. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed surfactants of the instant claims because the instantly claimed surfactants are well known and commercially available surfactants which are

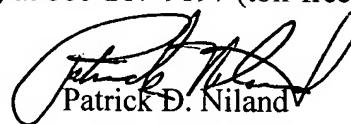
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encompassed by the generic disclosures of the reference (page 4, lines 3-5) which would have been expected to give the surface active effect required of the surfactants of the reference.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Patrick D. Niland  
Primary Examiner  
Art Unit 1714